

FIELD KEY TO THE PLANT COMMUNITIES OF ROCK CREEK PARK

This is a preliminary key. It has not yet been tested in the field at Rock Creek Park. The key will be tested at a later date and may be revised to facilitate use and accuracy of assigning correct association names to field points. Note that species included in an association name may be absent from a given plot or from all points in the park (due to the fact that associations are named based on the rangewide characteristics rather than local descriptions). For example, some of the floodplain forests in Rock Creek Park, classified as “sycamore - green ash forest”, are co-dominated by sycamore, tulip poplar and red maple and contain no green ash.

Also note that the dominant association at the park is the beech - white oak / mayapple forest (*Fagus grandifolia* - *Quercus alba* / *Podophyllum peltatum* Forest Association) including the two variants described. Therefore, if one is on upland terrain in the park the vegetation is most likely to be of this type.

Go to
key #

1a. Vegetation dominated by trees (height 2m or taller); forested**2**

1b. Vegetation characterized by shrubs (>25% cover) < 2m tall, or vines
Blackberry / Porcelain berry Shrubland
***Rubus allegheniensis* / *Ampelopsis brevipedunculata* Shrubland**

2a. Tree layer with evergreen component; at least >10% cover in canopy or sub-canopy is
 needle-leaved**3**

3a. Evergreen component is predominantly loblolly pine (*Pinus taeda*). Black
 cherry (*Prunus serotina*) and willow oak (*Quercus phellos*) usually present.
 Currently known only from Fort Totten Area (low probability that it occurs at
 other locations in the park). Other diagnostic features: sweet gum (*Liquidambar*
styraciflua) may be present; beech (*Fagus grandifolia*) is absent or infrequent...

Loblolly pine - mixed oak forest

***Pinus taeda* - *Quercus* (*alba*, *falcata*, *stellata*) Forest [Provisional]**

3b. Evergreen component is Virginia pine. Occurs with mixed hardwoods (e.g.,
 oaks, beech)

Virginia Pine - oak forest

***Pinus virginiana* - *Quercus* (*alba*, *stellata*, *falcata*, *velutina*) Forest
 Association**

2b. Vegetation predominantly deciduous; less than 10% canopy or subcanopy cover in pine.....4

4a. Soils wet at some point of the year (saturated or seasonally flooded). May be dry part of the year.....5

5a. On floodplain or stream banks. Sycamore (*Platanus occidentalis*) and boxelder (*Acer negundo*) present (sycamore may be widely scattered). Beech (*Fagus grandifolia*) and holly (*Ilex opaca*) absent. Other diagnostic species include river birch (*Betula nigra*), mild water-pepper (*Polygonum hydropiperoides*) and nettles (*Laportea canadensis*).....

Sycamore - green ash forest (floodplain forest)
***Platanus occidentalis* - *Fraxinus pennsylvanica* Forest**

5b. Not restricted to stream courses. Tulip poplar dominant in canopy, > 60-70% cover (essentially a monoculture); other tree species sparse, comprising less than 20% cover. Mesic to seasonally wet soils. Shrub layer variable.....

Tulip poplar forest
***Liriodendron tulipifera* Forest [Provisional]**

4b. Soils not influenced by water table.....6

6a. Oaks dominant; tulip poplar infrequent.....7

7a. Chestnut oak (*Quercus prinus*) dominant; black cherry and sweet gum (*Liquidambar*) absent. Black gum (*Nyssa sylvatica*) and black huckleberry (*Gaylussacia baccata*) typical. Herb layer sparse. Well-drained soils of hilltops (or upper slopes).....

Chestnut oak forest
***Quercus (pinus, velutina) / Gaylussacia baccata* Forest**

7b. Not as above; canopy dominated by mix of red, black, chestnut and/or white oaks. Tulip poplar < 10 % cover. Beech may be present in sub-canopy or shrub layer (or absent).....8

8a. Black cherry (*Prunus serotina*) and willow oak (*Quercus phellos*) present. Sweet gum (*Liquidambar*) and loblolly pine (*Pinus taeda*) characteristic. Currently known only from Fort Totten Area (low probability that it occurs at other locations in the park).

Loblolly pine - mixed oak forest

***Pinus taeda* - *Quercus* (*alba*, *falcata*, *stellata*) Forest**
[Provisional]

8b. Not as above; mixed oak species dominant, black cherry absent or very uncommon. Maple-leaved viburnum typical. Tulip poplar absent to sparse. Well-drained soils of upper slopes and hilltops.

MIXED OAK / BEECH VARIANT of

Beech -white oak / mayapple forest

Fagus grandifolia* - *Quercus alba* / *Podophyllum peltatum
Forest

6b. Oaks not dominant in canopy or mixed with tulip poplar. Beech present >10% cover, co-dominant with other hardwoods (tulip poplar, oaks, etc.).....9

9a. Beech and tulip poplar co-dominant (canopy and sub-canopy). Spicebush (*Lindera benzoin*) frequent. Hornbeam (*Carpinus caroliniana*) is characteristic but may be absent. Occurs on lower slopes and ravines.

BEECH - TULIP POPLAR VARIANT of

Beech -white oak / mayapple forest

***Fagus grandifolia* - *Quercus alba* / *Podophyllum peltatum* Forest**

9b. Not as above. Canopy and sub-canopy is co-dominated by white oak (*Quercus alba*), tulip poplar, and beech. Other oak species present. Holly and flowering dogwood typical but often sparse. Maple-leaved viburnum present. Intergrades with the two variants described for this type.

Beech -white oak / mayapple forest (CLASSIC TYPE)

***Fagus grandifolia* - *Quercus alba* / *Podophyllum peltatum* Forest**